PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Shuichi Takagi et al.

Serial No.: 10/699,102

Filed: October 31, 2003

Confirm, No.: 2678

Title: Method And Apparatus For Synchronously Transferring Data From A Local

Storage Medium To A Remote Storage Medium At A Select Time Based Upon

Available Bandwidth And Amount Of Local Data

Art Unit: 2167

Examiner: Miranda Le

Docket No: 50T5441.01

Via EFS Web Commissioner for Patents

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<u>Melissa Schrader</u> (Printed Name of Person Sending Correspondence)

> /Melissa Schrader/ (Signature)

APPEAL BRIEF UNDER 37 C.F.R. §41.37

Sir:

As set forth in the Notice of Appeal dated November 22, 2010, the time for response extended to Monday, January 24, 2010, Appellants hereby appeal the final decision of the Examiner in the above-identified application rejecting Claims 1-14 and 24-27. Any deficiencies may be charged to Deposit Account No. 50-1047.

Appellants respectfully request that the Board of Patent Appeals and Interferences reverse the Examiner's rejection of the claimed subject matter.

I. REAL PARTY IN INTEREST

Sony Corporation and Sony Electronics Inc. are the assignees of the present invention and the real parties in interest.

II. RELATED APPEALS AND INTERFERENCES

No prior and pending appeals, judicial proceedings or interferences are known to the appellant which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

The presently pending claims are Claims 1-14 and 24-27.

Claims 1-14 and 24-27 are on appeal. Claims 15-23 were withdrawn from consideration. A copy of appealed Claims 1-14 and 24-27 is provided in the attached Appendix.

Appellant hereby appeals the final decision of the Examiner in the above-identified application rejecting Claims 1-14 and 24-27.

IV. STATUS OF AMENDMENTS

A Final Office Action was mailed on July 20, 2010, rejecting Claims 1-14 and 24-27. Appellant responded to the Final Office Action with a Notice of Appeal and Pre-Appeal Arguments filed on November 22, 2010. In a Notice of Panel Decision from Pre-Appeal Brief Review, dated December 9, 2010, indicated that there is at least one issue for appeal, and that an Appeal Brief must be filed.

No claim amendments were made subsequent to the July 20, 2010 Final Office Action.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent Claim 1 is directed to a method for synchronously transferring an amount of local data from a local data storage medium (Fig. 2, 20) to a remote data storage medium (Fig. 2, 36) via a communications link (Fig. 2, 17) having an available bandwidth, the local data storage medium (Fig. 2, 20) associated with a local computer system (Fig. 2, 12) having a local processor (Fig. 2, 22) sequentially responsive to a plurality of local computer programs

(paragraph [0020]), the remote data storage medium (Fig. 2, 36) associated with a remote computer system (Fig. 2, 14) non-redundant of the local computer system and having a remote processor (Fig. 2, 34), the method comprising:

evaluating local user conditions associated with transfer of the local data (Fig. 2, block 202, paragraph [0050], lines 7-11 (corresponding to page 15, lines 19-23));

based on the currently available bandwidth and the amount of local data, approximating a transfer time for the local data (Fig. 2, block 204, paragraph [0050], lines 11-13 (corresponding to page 15, lines 23-25));

determining a status of the local processor, wherein the determining step includes determining if the local processor has reduced activity or is idle (paragraph [0050], lines 17-19 (corresponding to page 15, lines 29-31));

based on the approximated transfer time, the local user conditions, and the status of the local processor, selecting a time of day at which to transmit the local data to the remote data storage medium (Fig. 2, block 206, paragraph [0050], lines 13-17 (corresponding to page 15, lines 25-29)); and

automatically arranging transfer of the local data to the remote data storage medium via the communications link at the selected time of day (Fig. 2, block 208, paragraph [0030], lines 1-5 (corresponding to page 9, lines 20-24)).

Dependent Claim 26 is directed to the method of Claim 1, wherein the local user conditions comprise file extensions of the local data (paragraph [0029], lines 1-9 (corresponding to page 9, lines 11-19)).

Dependent Claim 27 is directed to the method of Claim 26, wherein local data having a first file extension is transferred immediately and wherein local data having a second file extension is transferred at a later time of day (Fig. 2, data 25; paragraph [0029], lines 4-6 (corresponding to page 9, lines 14-16)).

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VI. GROUNDS OF REJECTION TO BE REVIEWED UPON APPEAL

Appellant presents the following issues for review:

- A. Would the subject matter of appealed Claims 1-8, 10-14, 24 and 25 have been unpatentable over Carmel in view of Miller and Grambihler, and would the subject matter of appealed Claim 9 have been unpatentable over Carmel in view of Miller and Grambihler in view of Roberts.
- B. Would the subject matter of appealed Claim 26 have been unpatentable over Carmel in view of Miller and Grambihler in view of Knox.
- C. Would the subject matter of appealed Claim 27 have been unpatentable over Carmel in view of Miller and Grambihler and Knox in view of Quinet.

VII. ARGUMENT

A. Would the subject matter of appealed Claims 1-8, 10-14, 24 and 25 have been unpatentable over Carmel in view of Miller and Grambihler, and would the subject matter of appealed Claim 9 have been unpatentable over Carmel in view of Miller and Grambihler in view of Roberts.

First, Applicant respectfully notes that the Examiner relies upon "Takeuchi" at least on pages 20, 21 and 34 of the pending July 20, 2010 Final Action (in the section Responding to Applicant's arguments) – yet this reference is no longer RELIED UPON IN REJECTING THE PENDING CLAIMS (and was not relied upon in the previous December 28, 2009 Final Action). Of course the Examiner cannot rely upon a reference that is not being applied against the claims, in presenting arguments for the actual outstanding rejections. Clarification was previously requested, but the request was ignored by the Examiner.

Before any further consideration can be provided, this issue must be resolved, but the Examiner has refused to address this issue to date.

The rejections under 35 U.SC. 103(a) are erroneous. The Examiner's reasoning does not meet the burden of establishing a *prima facie* case of obviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to *modify the reference* or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art references when combined *must teach or suggest all the claimed features*. In addition, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure.

Applicants respectfully state that the rejection fails because the combined references fail to teach or to suggest all of the elements of the present invention as claimed, and, because there is no suggestion or motivation to combine even the alleged teachings in the manner proposed.

The Examiner's reasoning does not meet the burden of establishing a *prima facie* case of obviousness as to each of independent Claims 1 and 14. As explained in Applicant's specification as filed, a method/apparatus according to Applicant's teachings evaluates local user conditions associated with transfer of the local data; based on the currently available bandwidth and the amount of local data, approximates a transfer time for the local data; and determines a status of the local processor, wherein the determination includes determining if the local processor has reduced activity or is idle; and based on the approximated transfer time, the local user conditions, and the status of the local processor, selects a time of day to transmit the local data to the remote data storage medium. The combined teachings of Carmel, Miller and Grambihler fails to teach these features.

Independent Claim 1 is directed to **a** method for synchronously transferring an amount of local data from a local data storage medium to a remote data storage medium via a communications link having an available bandwidth, the local data storage medium associated with a local computer system having a local processor sequentially responsive to a plurality of local computer programs, the remote data storage medium associated with a remote computer system

non-redundant of the local computer system and having a remote processor, the method including: evaluating local user conditions associated with transfer of the local data; based on the currently available bandwidth and the amount of local data, approximating a transfer time for the local data; determining a status of the local processor, wherein the determining step includes determining if the local processor has reduced activity or is idle; based on the approximated transfer time, the local user conditions, and the status of the local processor, selecting a time of day at which to transmit the local data to the remote data storage medium; and automatically arranging transfer of the local data to the remote data storage medium via the communications link at the selected time of day.

Independent Claim 14 is an apparatus claim corresponding to method Claim 1 and includes the noted limitation.

More specifically, independent Claim 14 is directed to an apparatus for synchronously transferring an amount of local data from a local data storage medium to a remote data storage medium via a communications link having an available bandwidth, the local data storage medium associated with a local computer system having a local processor sequentially responsive to a plurality of local computer programs, the remote data storage medium associated with a remote computer system non-redundant of the local computer system and having a remote processor. The apparatus includes a computer-readable storage medium; and a processor responsive to the computer-readable storage medium and to a computer program, the computer program, when loaded into the processor, operative to perform a method including the steps of: evaluating local user conditions associated with transfer of the local data; based on the currently available bandwidth and the amount of local data, approximating a transfer time for the local data; determining a status of the local processor, wherein the determining step includes determining if the local processor has reduced activity or is idle; based on the approximated transfer time, the local user conditions, and the status of the local processor, selecting a time of day to transmit the local data to the remote data storage medium; and automatically arranging transfer of the local data to the remote data storage medium via the communications link at the selected time of day.

As explained in paragraph [0005] of Applicants' specification, as filed, a "typical local PC client has a single processor under independent control, and a limited bandwidth communication link to

any remote data storage medium" – the "local PC may be unable to concurrently perform multiple processing-intensive tasks, such as transferring large data files and running unrelated user applications, and/or data transfers may be slow".

Applicants' proposed method/apparatus takes these facts into account, by determining if a local processor is idle or has reduced activity, and using that determination (*in addition to BOTH the local user conditions* and the *approximated time for transfer*) to select a time of day at which to transmit the local data to the remote storage device. As further explained at paragraph [0029], "the *user may specify conditions* associated with selection of user data 25, such as, among other conditions: where the data is located; file extensions associated with the data; times, or events, which would trigger transfer of the data; or any combination thereof...the user may request that user data 25 having file extensions such as .DOC or .JPG be *transferred immediately*, while user data 25 have file extensions such as .MPG or .RM be *transferred overnight*".

The rejection of independent Claim 1, found at pages 2, 3, 4, 5, 6, 7, 8 AND 9 of the Final Action, alleges on pages 2 through 6, that Carmel teaches each of the elements of Claim 1. Then, on pages 7 through 9 the Examiner alleges that Carmel "does not explicitly state the term 'evaluating local user conditions associated with transfer of the local data", but implicitly teaches this element. The Examiner also on page 8, admits that Carmel and Grambihler do not teach "selecting a time based on bandwidth".

First, Applicant notes that Claim 1 requires a method that - based upon 3 factors --

- (1) the approximated transfer time,
- (2) the local user conditions, and
- (3) the *status of the local processor* –

selects a time of day at which to transmit the local data to the remote data storage medium, and automatically arranges transfer of the local data to the remote data storage medium at the selected time of day.

Carmel is directed to a method for "real –time broadcasting from a transmitting computer to one or more client computers – including 'providing at the transmitting computer a data stream having a given data rate, and dividing the stream into a sequence of *slices*, each slice having a predetermined data size associated therewith".

In Carmel, "data stream 40 comprises a series of data *slices* 42, 44, 46, 48, etc....each slice contains a segment of video and/or audio data, corresponding to a respective, successive time interval labeled T₁, T₂, T₃, etc." (Col. 7, lines 23-25). In addition "time intervals T₁, T₂, T₃, etc are not all equal, but rather are adjusted by computer 34 in response to the transmission rate" (Col. 7, lines 42-45). These "time intervals" are simply time slots, each of which contain a data slice 42, 44, 46, 48, etc. Although these time intervals T₁, T₂, T₃, etc, may be 'adjusted by computer 34 in response to the transmission rate' (col. 7, lines 35-49, cited in the Action page 7, lines 1-3), Carmel does not teach (or even suggest) a method that "selects *a time of day* to transmit local data to the remote data storage medium, and automatically arranges transfer of the local data to the remote data storage via the communications link at the selected *time of day*." Again, Carmel simply does not teach, or suggest, in any way, the elements recited in Claims 1 and 14, of a method/apparatus that - based upon all 3 factors --

- (1) the approximated transfer time,
- (2) the local user conditions, and
- (3) the status of the local processor –
- selects a time of day at which to transmit the local data to the remote data storage medium, and automatically arranges transfer of the local data to the remote data storage medium at the selected time of day.

The Final Action takes the position that Carmel implicitly teaches a time of day at which "as in real time" – and further that Miller teaches the limitation 'selecting a time based on bandwidth' - in Fig. 7, and Table 1 in column 7 (page 8).

Again - -in the pending claims, based upon ALL 3 of the RECITED ELEMENTS (the approximated transfer time, local user conditions, and status of the local processor), a TIME OF DAY IS SELECTED, at which the local data will be TRANSMITTED to the remote data storage medium. First, with respect to "(1) the approximated transfer time, ... selecting *a time of day at which* to transmit the local data to the remote storage medium, Applicant submits that Carmel does not teach or even suggest selecting a time of day (even in 'real time' broadcasting) based upon the approximated transfer time. The "adjustment" of various "time intervals T₁, T₂, T₃, etc", by computer 34 in response to the transmission rate does not provide any teaching of *selecting a time of day* to transmit data *based upon an approximated transfer time*.

The Action then relies upon the alleged teachings of Grambihler as teaching yet another element not explicitly, or implicitly in Applicant's opinion, taught by Carmel - specifically, "selecting a time of day at which to transmit local data based upon '(2) local user conditions'". As detailed in para's [0029]-[0030] of Applicant's specification as filed, a "user may specify conditions associated with selection of user data...such as...where the data is located; file extensions associated with the data; times, or events, which would trigger transfer of the data; or any combination thereof...[f]or example, the user may request that user data 25 having file extensions such as .DOC or .JPG be transferred immediately, while user data 25 have file extensions such as .MPG or .RM be transferred overnight".

Grambihler describes various functions performed by "synchronization manager 60" – including the "synchronization of local files with network database files 'every Thursday at 11:00 PM" --- even *if* this could somehow be read as describing "*evaluating* local user *conditions*" (it is not seen how this provides any teaching of this element) – it simply does NOT suggest "*selecting a time of day upon which to TRANSMIT DATA based upon evaluated local user conditions*".

Even IF Grambihler teaches *synchronizing* subscriptions - during idle times; and *synchronizing* local files with network database files – every Thursday at 11:00PM --- Grambihler does NOT TEACH OR EVEN SUGGEST selecting a time of day in which local data will be transmitted to a remote storage medium, based upon ALL THREE OF THE SPECIFIC ELEMENTS

RECITED IN THE CLAIMS --- Grambihler does NOT teach or even suggest selecting a time of day based upon element (1) – i.e., "the approximated TRANSFER TIME" -- COMBINED with elements (2) *the local user conditions* and (3) the *status of the local processor*.

Carmel is very specifically directed to 'real-time broadcasting' (see e.g., col. 1, lines 50-53, "it is an object of the present invention to provide substantially continuous, high-bandwidth data streaming over a network..." – and also, quoted from col. 2, lines 17-21 of Carmel, "the division of the data stream into slices and the inclusion of the slice indices in the data stream...allows the broadcast to go on substantially in real time").

Grambihler's alleged teachings of 'scheduling synchronizations' does not teach or even suggest *evaluating local user conditions in real time* and *selecting a time of day* in which to transmit local data to a remote storage medium.

In addition, the Action again acknowledges that Carmel and Grambihler do not teach "selecting a time based on bandwidth" and directs Applicant to Miller for such teaching.

With respect to the assertions of the teachings and alleged 'obviousness' to combine such teachings with those of Carmel and Grambihler, Applicant submits that even *if* Miller describes 'scheduling data transmission' from one or more content sources over a network to one or more replicated servers — it would *not be obvious* to one skilled in the art, in *any way*, to somehow combine such teachings with those of Carmel and Grambihler in the manner suggested in the Action. In fact, again – Carmel very specifically *teaches away from any such modification—combination of teachings*—Carmel is specifically directed to 'REAL-TIME broadcasting. For at least the foregoing reasons, Applicant submits that the *combined teachings* of Carmel, Grambihler and Miller, fail to teach or suggest, at least, the recited elements of selecting a time of day to transmit local data to the remote storage medium based on (1) the *approximated transfer time*, (2) *local user conditions*, and (3) *status of the local processor*.

Claims 2-13, 24 and 25 depend from one or the other of independent Claims 1 and 13, and are believed patentable over the art of record for at least the same reasons as Claims 1 and 13, and as reciting additional limitations that distinguish over the cited art.

Accordingly, Applicant submits that each of Claims 1-14, 24 and 25 is patentable over the combined teachings of Carmel, Grambihler and Miller and reconsideration is requested.

B. Would the subject matter of appealed Dependent Claim 26 have been unpatentable over Carmel in view of Miller and Grambihler in view of Knox.

Dependent Claim 26 recites that the local user conditions comprise file extensions of the local data. The Action relies upon the alleged teachings of Carmel, Miller, Grambihler and Knox to reject Claim 26. The Examiner takes the position that "Miller implicitly teaches the file extension as criterion" (to select a time of day at which to transmit local data), reciting col. 6, lines 52-59 of Miller, that "the priority level for each content source 12, 14 is assigned based on some criterion...certain content sources 12, 14 may be charged a greater fee by the scheduler..." – Applicant submits that this does not, in any way, implicitly teach 'using a file extension' as criterion. In addition, even *if* Knox describes 'analyzing the content of the uploaded data file'

(e.g., a *.rm file indicates a file format compatible with the Real Media file structure) – Knox does *not* teach or suggest selecting a time of day at which to transmit local data based upon a local user condition comprising file extensions of the local data.

For at least the foregoing reasons, Applicant respectfully submits that the *combined teachings* of the four references cited against Claim 26, i.e., Carmel, Grambihler Miller and Knox, fail to teach or suggest, at least, the recited elements of Claim 26.

Reconsideration and withdrawal of the rejection of Claim 26 are therefore requested.

C. Would the subject matter of appealed Claim 27 have been unpatentable over Carmel in view of Miller and Grambihler and Knox in view of Quinet

Dependent Claim 27 recites that the "local data having a first file extension is transferred immediately and local data having a second file extension is transferred at a later time of day". The Action attempts to arrive at the method of Claim 27, by turning to the alleged teachings of Carmel–Miller–Grambihler– Knox *and* Quinet, and somehow 'finding' various elements and then *combining* those elements in a manner that would be 'obvious' to one skilled in the art. Quinet's description of "updating priorities" according to a rule wherein "the file extension looks like HTML" to "ensure that a HTML page requested from the bookmarks or typed in directly will be *requested* with a high priority" –does not teach or suggest a method in which a "time of day" is selected based upon local user conditions – the local user conditions being such that 'local data having a first file extension is transferred immediately and local data having a second file extension is transferred at a later time of day'. This is not taught or suggested by Quinet – by itself or in any combination with Carmel, Miller, Grambihler and Knox.

Applicant submits that each of the rejections under 35 U.S.C § 103(a) has been obviated and the rejections should be reconsidered and withdrawn.

For at least the foregoing reasons, Applicant respectfully submits that the *combined teachings* of the five references cited against Claim 27, i.e., Carmel, Grambihler Miller, Knox and Quinet, fail to teach or suggest, at least, the recited elements of Claim 27.

Reconsideration and withdrawal of the rejection of Claim 27 are therefore requested.

CONCLUSION

The references relied upon by the Examiner do not support a *prima facie* case of obviousness as to Claims 1-14 and 24-27. Accordingly, Appellant respectfully submits that the pending claims, Claims 1-14 and 24-27 are patentable over the art of record and it is respectfully requested that the Board reverse the final rejection of the subject matter of these claims for the reasons given above.

Respectfully submitted,

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Date: January 24, 2011

VIII. Claims Appendix

1. A method for synchronously transferring an amount of local data from a local data storage medium to a remote data storage medium via a communications link having an available bandwidth, the local data storage medium associated with a local computer system having a local processor sequentially responsive to a plurality of local computer programs, the remote data storage medium associated with a remote computer system non-redundant of the local computer system and having a remote processor, the method comprising:

evaluating local user conditions associated with transfer of the local data;

based on the currently available bandwidth and the amount of local data, approximating a transfer time for the local data;

determining a status of the local processor, wherein the determining step includes determining if the local processor has reduced activity or is idle;

based on the approximated transfer time, the local user conditions, and the status of the local processor, selecting a time of day at which to transmit the local data to the remote data storage medium; and

automatically arranging transfer of the local data to the remote data storage medium via the communications link at the selected time of day.

2. A computer-readable medium encoded with a computer program which, when loaded into a processor, implements a method for synchronously transferring an amount of local data from a local data storage medium to a remote data storage medium via a communications link having an available bandwidth, the local data storage medium associated with a local computer system having a local processor sequentially responsive to a plurality of local computer programs, the remote data storage medium associated with a remote computer system non-redundant of the local computer system and having a remote processor, the method comprising:

evaluating local user conditions associated with transfer of the local data;

based on the currently available bandwidth and the amount of local data, approximating a transfer time for the local data;

determining a status of the local processor, wherein the determining step includes determining if the local processor has reduced activity or is idle;

based on the approximated transfer time, the local user conditions, and the status of the local processor, selecting a time of day at which to transmit the local data to the remote data storage medium; and

automatically arranging transfer of the local data to the remote data storage medium via the communications link at the selected time of day.

- 3. The computer-readable medium according to claim 2, wherein the computer program comprises one of the plurality of local computer programs, and the processor comprises the local processor.
- 4. The computer-readable medium according to claim 2, wherein the processor comprises the remote processor.
- 5. The method according to claim 1, further comprising: automatically transmitting the local data to the remote data storage medium at the selected time.
- 6. The method according to claim 1, further comprising: automatically arranging for interruption of transfer of the local data based on the status of the local processor.
- 7. The method according to claim 6, further comprising: automatically interrupting transfer of the local data based on the status of the local processor.
- 8. The method according to claim 6, wherein the status of the local processor is inferred from one of: a status of a display device; a status of a memory; a configured processor utilization; and a time since a last interactive use of the local computer system.
- 9. The method according to claim 8, wherein the status of the display device comprises activation of a screen-saver.

- 10. The method according to claim 6, further comprising: after automatically arranging for interruption of transfer of the local data, automatically arranging for resumption of transfer of the local data based on the status of the local processor.
- 11. The method according to claim 10, further comprising: automatically resuming transfer of the local data based on the status of the local processor.
- 12. The method according to claim 1, wherein the local user conditions comprise one of: a location of the local data; a preferred transfer time; a file extension associated with the local data; and a status of the communication link.
- 13. The method according to claim 1, wherein the remote processor and the local processor are under independent control.
- 14. An apparatus for synchronously transferring an amount of local data from a local data storage medium to a remote data storage medium via a communications link having an available bandwidth, the local data storage medium associated with a local computer system having a local processor sequentially responsive to a plurality of local computer programs, the remote data storage medium associated with a remote computer system non-redundant of the local computer system and having a remote processor, the apparatus comprising:
 - a computer-readable storage medium; and
- a processor responsive to the computer-readable storage medium and to a computer program, the computer program, when loaded into the processor, operative to perform a method comprising:

evaluating local user conditions associated with transfer of the local data; based on the currently available bandwidth and the amount of local data, approximating a transfer time for the local data;

determining a status of the local processor, wherein the determining step includes determining if the local processor has reduced activity or is idle;

based on the approximated transfer time, the local user conditions, and the status of the local processor, selecting a time of day to transmit the local data to the remote data storage medium; and

automatically arranging transfer of the local data to the remote data storage medium via the communications link at the selected time of day.

- 24. The method according to claim 1, wherein the status is determined by direct monitoring of the local processor.
- 25. The method according to claim 1, wherein the status is inferred by monitoring a status of other programs associated with the local computer system.
- 26. The method according to claim 1, wherein the local user conditions comprise file extensions of the local data.
- 27. The method according to claim 26, wherein local data having a first file extension is transferred immediately and wherein local data having a second file extension is transferred at a later time of day.

IX. Evidence Appendix

None.

X. Related Proceedings Appendix

None.